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**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of:

Confirmation No. 6768

Matthew D. Birder

Group Art Unit No.: 2178

Serial No.: 09/932,110

Examiner: Thu V. Huynh

Filed: August 16, 2001

For: **ENHANCED MECHANISM FOR AUTOMATICALLY GENERATING A  
TRANSFORMATION DOCUMENT**

**Mail Stop Appeal Brief – Patents**  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**APPEAL BRIEF**

Sir:

This Appeal Brief is submitted in support of the Notice of Appeal filed on April 27, 2005.

**I. REAL PARTY IN INTEREST**

Sun Microsystems, Inc. is the real party in interest.

**II. RELATED APPEALS AND INTERFERENCES**

Appellants are unaware of any related appeals or interferences.

### **III. STATUS OF CLAIMS**

Claims 1-6, 8-22, and 24-32 are pending in this application, were finally rejected and are the subject of this appeal. Claims 7 and 23 were canceled during prosecution.

### **IV. STATUS OF AMENDMENTS**

No amendments were filed after the final Office Action.

### **V. EXPLANATION OF THE INVENTION**

The present application includes independent claims 1 and 17. Claim 1 is a method claim, and claim 17 is a computer readable medium counterpart of claim 1. Both independent claims are directed to the automatic generation of a transformation document.

In recent years, the use of XML (extensible markup language) has greatly proliferated. In many applications involving XML, it is necessary to transform a first XML document into a second XML document. This transformation is typically carried out by applying a transformation document to the first XML document to derive the second XML document. The transformation document is often written in the XSLT (extensible stylesheet language transformations) language, and is typically written manually by a user.

A problem with this approach is that XSLT is a very complicated language. It is very difficult for users to learn and master, and even when one has mastered the language, the intricacies of the language make manual development of an XSLT transformation document error prone. To overcome this problem, the present invention provides a method and computer readable medium for enabling a transformation document to be automatically generated.

According to the invention as claimed, a transformation document is automatically generated by initially analyzing a first document. This document may be viewed as the document to be transformed. A second document is also analyzed. This document represents the desired result of the transformation. Put another way, the second document represents the result that should be derived after the first document is transformed. Then, based upon the first and second documents, a transformation document is automatically generated. The transformation document is generated with such content that when it is processed in conjunction with the first document, it gives rise to a result document that is at least an approximation of the second document. In other words, the transformation document can be applied to the first document to derive a result document that resembles the second document. By automatically generating a transformation document in this way, much of the error that results from a user manually writing the transformation document is eliminated.

A graphical representation of this process is shown in the enclosed drawing 1. As depicted in drawing 1, the transformation document 103 is generated based upon the first document 101 and the second document 102. After generation, the transformation document 103 can be applied to the first document 101 to give rise to a result document 104 that is at least an approximation of the second document 102.

**VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

1. Claims 1-6, 8, 14-16, 17-22, 24, and 30-32 stand rejected under 35 U.S.C. §102(e) as being anticipated by Worden (U.S. Pub. No. US2003/0149934 A1).
2. Claims 9-11 and 25-27 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Worden in view of Wheeler et al. (U.S. Pub. No. US 2002/0055932 A1).
3. Claims 12 and 28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Worden in view of Wheeler et al. and further in view of Weinberg et al. (US 2002/0194196 A1).
4. Claims 13 and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Worden in view of Wheeler et al. and further in view of Menke (US 2002/0055932 A1).

## VII. ARGUMENTS

### A. Claims 1-6, 8, 14-16, 17-22, 24, and 30-32 are patentable over Worden

It is well established that, in order to anticipate a claim, a reference must disclose each and every element of the claim. *General Electric Co. v. Nintendo Co., Ltd.*, 179 F.3d 1350, 1356 (Fed. Cir. 1999); *Finnigan Corp. v. U.S. Int'l Trade Comm'n*, 180 F.3d 1354, 1367 (Fed. Cir. 1999). In the present case, Worden fails to disclose or even suggest at least one of the elements of independent claims 1 and 17. Specifically, Worden does not disclose or suggest automatically generating, based upon a first and a second document, a transformation document which, when processed in conjunction with the first document, gives rise to a result document that is at least an approximation of the second document, as recited in claims 1 and 17. For at least this reason, Applicants submit that independent claims 1 and 17 are patentable over Worden.

Instead of disclosing the invention as claimed in claims 1 and 17, Worden discloses a method for translating a document written in a first XML language into a document written in a second XML language. Worden does this by transforming the document in the first XML language into a common class model (also referred to as a business information model), and then transforming the common class model into a document in the second XML language [paragraphs 0035 and 0042]. Basically, rather than transforming the document directly from the first XML language into the second XML language, Worden goes through an intermediate common class model step. According to Worden, this helps to reduce the number of transformation documents that need to be created.

In Worden, several mappings are provided. A first mapping maps the first XML language to the common class model [paragraph 0028]. A second mapping maps the common class model to the second XML language. These mappings, which may be in an XML form called Meaning Definition Language (MDL), are used to generate transformation

documents [paragraph 0040]. Once generated, the transformation documents are used to transform a document written in the first XML language into a document written in the second XML language [paragraph 0041].

The operation of Worden is best illustrated in Worden's Figure 9. Schema(1) in Figure 9 represents the structure definition of a first XML language (i.e. the input language) [paragraph 0242]. This structure definition sets forth the elements, attributes, structures, syntax, etc. for the first language [paragraphs 0008 and 0009]. Schema(2) represents the structure definition for a second XML language (i.e. the output language) [paragraph 0244]. This structure definition sets forth the elements, attributes, structures, syntax, etc. for the second language [paragraphs 0008 and 0009]. UML represents the business information model that serves as the common class model between the two languages [paragraphs 0037 and 0241]. MDL(1) represents the mappings between the first language defined by Schema(1) and the common class model defined by UML [paragraphs 0037, 0040, 0243]. MDL(2) represents the mappings between the second language defined by Schema(2) and the common class model defined by UML [paragraphs 0037, 0040, 0245]. Based upon MDL(1), Schema(1), MDL(2), and Schema(2), a set of transformation documents (represented by XSLT(1=>2)) is generated [paragraphs 0239]. Once generated, XSLT(1=>2) is applied to a document XML(1) written in the first XML language to translate it into a document XML(2) written in the second XML language. Notice that the information in document XML(2) is substantially the same as the information in document XML(1). The information is just expressed in a different XML language (i.e. the second XML language rather than the first XML language).

Given the above manner of operation, there is no reasonable interpretation of Worden that reads upon all of the limitations of claims 1 and 17. In the Final Office Action, the Examiner interpreted MDL(1) to be the first document recited in claims 1 and 17, MDL(2) to be the second document, and XSLT(1=>2) to be the transformation document. This interpretation reads on claims 1 and 17 to the extent that the transformation documents XSLT(1=>2) are generated based upon MDL(1) and MDL(2). However, unlike the transformation document of claims 1

and 17, XSLT(1=>2) cannot be processed in conjunction with MDL(1) to give rise to a result document that is an approximation of MDL(2). This is simply not the intended use of XSLT(1=>2). XSLT(1=>2) is intended to be used to transform a document XML(1) written in the first XML language into a document XML(2) written in the second XML language; it is not intended to transform the mappings in MDL(1) into the mappings of MDL(2). If XSLT(1=>2) were applied to MDL(1), there is no telling what would result. Since MDL(1) is not written in the first XML language, and since MDL(2) is not written in the second XML language, there is no reason to believe that applying XSLT(1=>2) to MDL(1) would produce anything that even resembles MDL(2).

Another point to note is that the actual mapping information in MDL(1) is different than the actual mapping information in MDL(2) (this only makes sense since MDL(1) represents the mappings between Schema(1) and UML, and MDL(2) represents the mappings between Schema(2) and UML). Thus, MDL(1) and MDL(2) are different documents with different content. They are not different documents with the same content expressed in different XML languages. The point of a translation (and the purpose of XSLT(1=>2) is to preserve the content and meaning of a document but just express it in a different language [paragraphs 0237 and 0238]. A translation is not supposed to change/add/delete the actual content of a document. Thus, if MDL(1) and MDL(2) have different actual content, there is no way that the application of XSLT(1=>2) (which is supposed to perform a translation function) to MDL(1) would result in something that resembles MDL(2). To derive something that resembles MDL(2), XSLT(1=>2) would have to change/add/delete some of the content in MDL(1). This is not what the XSLT(1=>2) of Worden is intended to do. Overall, there is absolutely no teaching or suggestion whatsoever in Worden that XSLT(1=>2) can be processed with MDL(1) to derive a result that approximates MDL(2). For at least this reason, Applicant submits that the interpretation proffered by the Examiner in the Final Office Action does not fully read on, and hence, does not anticipate claims 1 and 17.

In the advisory action, it appeared (but was not clear) that the Examiner changed her interpretation. Under the new interpretation, Schema(1) was interpreted to be the first document recited in claims 1 and 17, Schema(2) was the second document, and XSLT(1=>2) was the transformation document. This interpretation suffers from similar shortcomings as the interpretation discussed above. Namely, while this interpretation reads on claims 1 and 17 to the extent that the transformation documents XSLT(1=>2) are generated based upon Schema(1) and Schema(2), it fails to show another aspect of claims 1 and 17. Specifically, unlike the transformation document of claims 1 and 17, XSLT(1=>2) cannot be processed in conjunction with Schema(1) to give rise to a result document that is an approximation of Schema(2). This is simply not the intended use of XSLT(1=>2). XSLT(1=>2) is intended to be used to transform a document XML(1) written in the first XML language into a document XML(2) written in the second XML language; it is not intended to transform the language definition set forth in Schema(1) into the language definition set forth in Schema(2).

A significant point to note is that a document that sets forth the definition for a language is very different from a document that is written in that language. Schema(1) sets forth the definition for the first XML language but it is not written in the first XML language. Similarly, Schema(2) sets forth the definition for the second XML language but it is not written in the second XML language. That being the case, if XSLT(1=>2) were applied to Schema(1), there is no telling what would result. Since Schema(1) is not written in the first XML language, and since Schema(2) is not written in the second XML language, there is no reason to believe that applying XSLT(1=>2) to Schema(1) would produce anything that even resembles Schema(2).

Another point to note is that the actual definition information in Schema(1) is different than the actual definition information in Schema(2) (this only makes sense since the first and second XML languages are different). Thus, Schema(1) and Schema(2) are different documents with different content. They are not different documents with the same content expressed in different XML languages. Since Schema(1) and Schema(2) have different actual content, there is no way that the application of XSLT(1=>2) (which is supposed to perform a translation



function) to Schema(1) would result in something that resembles Schema(2). To derive something that resembles Schema(2), XSLT(1=>2) would have to change/add/delete some of the content in Schema(1). This is not what the XSLT(1=>2) of Worden is intended to do. Overall, there is absolutely no teaching or suggestion whatsoever in Worden that XSLT(1=>2) can be processed with Schema(1) to derive a result that approximates Schema(2). For at least this reason, Applicant submits that the interpretation of Worden proffered by the Examiner in the Advisory Action does not fully read on, and hence, does not anticipate claims 1 and 17.

For at least the above reasons, Applicant submits that independent claims 1 and 17 are patentable over Worden.

Claims 2-6, 8, and 14-16 depend from, and hence, incorporate all of the limitations of claim 1. Similarly, claims 18-22, 24, and 30-32 depend from, and hence, incorporate all of the limitations of claim 17. Applicants submit that these claims, which recite further advantageous aspects of the invention, are also patentable over Worden for at least the same reasons as those given above in connection with independent claims 1 and 17.

**B. Claims 9-11 and 25-27 are patentable over Worden in view of Wheeler et al.**

It is well founded that in order to establish a *prima facie* case of obviousness under 35 U.S.C. §103(a), the references cited and relied upon must teach or suggest all of the limitations of a claim. *In re Freed*, 165 USPQ 570 (CCPA 1970); *In re Warner*, 154 USPQ 173 (CCPA 1967); *In re Lunsford*, 148 USPQ 721 (CCPA 1966). In the present case, the references of Worden and Wheeler et al., taken individually or in combination, fail to disclose or suggest all of the limitations of claims 9-11 and 25-27. Thus, Applicants submit that claims 9-11 and 25-27 are patentable over Worden and Wheeler et al.

Claims 9-11 depend from claim 1 and, hence, incorporate all of the limitations of claim 1. Similarly, claims 25-27 depend from claim 17 and, hence, incorporate all of the

limitations of claim 17. If it is shown that claims 1 and 17 are patentable over Worden and Wheeler et al., then it follows that claims 9-11 and 25-27 are also patentable over Worden and Wheeler et al.

As argued above in connection with claims 1 and 17, Worden fails to disclose or suggest at least the limitation of automatically generating, based upon a first and a second document, a transformation document which, when processed in conjunction with the first document, gives rise to a result document that is at least an approximation of the second document. Wheeler et al. also fails to disclose or suggest this limitation. The Examiner has made no attempt to show that this limitation is disclosed or suggested by Wheeler et al. Because both references fail to disclose or suggest this limitation, even if the references were combined (assuming for the sake of argument that it would have been obvious to combine the references), this limitation would still be missing from the combination. Thus, for at least this reason, Applicant submits that claims 1 and 17 are patentable over Worden and Wheeler et al., taken individually or in combination. Applicant also submits that claims 9-11 and 25-27, which recite further advantageous aspects of the invention, are likewise patentable over Worden and Wheeler et al. for at least the same reasons as those given above in connection with claims 1 and 17.

**C. Claims 12 and 28 are patentable over Worden in view of Wheeler et al. and further in view of Weinberg et al.**

Claim 12 depends from claim 1 and, hence, incorporates all of the limitations of claim 1. Similarly, claim 28 depends from claim 17 and, hence, incorporates all of the limitations of claim 17. If it is shown that claims 1 and 17 are patentable over Worden, Wheeler et al.,

and Weinberg et al., then it follows that claims 12 and 28 are also patentable over Worden, Wheeler et al., and Weinberg et al.

As argued above in connection with claims 1 and 17, Worden fails to disclose or suggest at least the limitation of automatically generating, based upon a first and a second document, a transformation document which, when processed in conjunction with the first document, gives rise to a result document that is at least an approximation of the second document. Wheeler et al. also fails to disclose or suggest this limitation. Weinberg et al. also fails to disclose or suggest this limitation. The Examiner has made no attempt to show that this limitation is disclosed or suggested by Weinberg et al. Because all of these references fail to disclose or suggest this limitation, even if the references were combined (assuming for the sake of argument that it would have been obvious to combine the references), this limitation would still be missing from the combination. Thus, for at least this reason, Applicant submits that claims 1 and 17 are patentable over Worden, Wheeler et al., and Weinberg et al., taken individually or in combination. Applicant also submits that claims 12 and 28, which recite further advantageous aspects of the invention, are likewise patentable over Worden, Wheeler et al., and Weinberg et al. for at least the same reasons as those given above in connection with claims 1 and 17.

**D. Claims 13 and 29 are patentable over Worden in view of Wheeler et al. and further in view of Menke**

Claim 13 depends from claim 1 and, hence, incorporates all of the limitations of claim 1. Similarly, claim 29 depends from claim 17 and, hence, incorporates all of the limitations of claim 17. If it is shown that claims 1 and 17 are patentable over Worden, Wheeler et al.,

and Menke, then it follows that claims 13 and 29 are also patentable over Worden, Wheeler et al., and Menke.

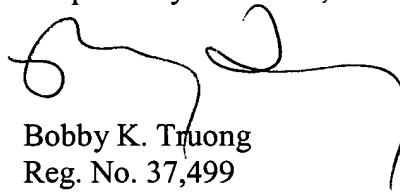
As argued above in connection with claims 1 and 17, Worden fails to disclose or suggest at least the limitation of automatically generating, based upon a first and a second document, a transformation document which, when processed in conjunction with the first document, gives rise to a result document that is at least an approximation of the second document. Wheeler et al. also fails to disclose or suggest this limitation. Menke also fails to disclose or suggest this limitation. The Examiner has made no attempt to show that this limitation is disclosed or suggested by Menke. Because all of these references fail to disclose or suggest this limitation, even if the references were combined (assuming for the sake of argument that it would have been obvious to combine the references), this limitation would still be missing from the combination. Thus, for at least this reason, Applicant submits that claims 1 and 17 are patentable over Worden, Wheeler et al., and Menke, taken individually or in combination. Applicant also submits that claims 13 and 29, which recite further advantageous aspects of the invention, are likewise patentable over Worden, Wheeler et al., and Menke for at least the same reasons as those given above in connection with claims 1 and 17.

#### **VIII. CONCLUSION AND PRAYER FOR RELIEF**

Based on the foregoing, it is respectfully submitted that the rejection of claims 1-6, 8, 14-16, 17-22, 24, and 30-32 under 35 U.S.C. §102(e) as being anticipated by Worden lacks the requisite factual and legal bases. It is further respectfully submitted that the rejection of claims 9-11 and 25-27 under 35 U.S.C. §103(a) as being unpatentable over Worden in view

of Wheeler et al. lacks the requisite factual and legal bases. It is further respectfully submitted that the rejection of claims 12 and 28 under 35 U.S.C. §103(a) as being unpatentable over Worden in view of Wheeler et al. and further in view of Weinberg et al. lacks the requisite factual and legal bases. It is further respectfully submitted that the rejection of claims 13 and 29 under 35 U.S.C. §103(a) as being unpatentable over Worden in view of Wheeler et al. and further in view of Menke lacks the requisite factual and legal bases. Applicant therefore respectfully requests that the Honorable Board reverse the rejection of claims 1-6, 8-22, and 24-32.

Respectfully submitted,



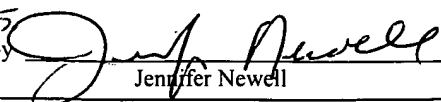
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Date: June 17, 2005

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on June 17, 2005 by   
on ~~December 3, 2004~~ by Jennifer Newell

**CLAIMS APPENDIX**

1. A computer-implemented method for generating a transformation document, comprising:

analyzing a first document;

analyzing a second document; and

automatically generating, based upon said first and second documents, a transformation document which, when processed in conjunction with said first document, gives rise to a result document that is at least an approximation of said second document.

2. The method of claim 1, wherein said first and second documents are XML (eXtensible Markup Language) documents.

3. The method of claim 2, wherein said transformation document is an XSLT (eXtensible Stylesheet Language Transformation) document.

4. The method of claim 1, wherein automatically generating said transformation document comprises:

selecting a particular data structure pattern that occurs in said second document;

determining whether said first document comprises a matching data structure pattern that matches said particular data structure pattern; and

in response to a determination that said first document comprises said matching data structure pattern, inserting a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data

structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be created in said result document.

5. The method of claim 4, wherein said particular triggering data structure pattern comprises said matching data structure pattern.

6. The method of claim 4, wherein automatically generating said transformation document further comprises:

in response to a determination that said first document does not comprise said matching data structure pattern, inserting a non-match template comprising one or more actions into said transformation document, said non-match template which indicates to a user that a triggering data structure pattern needs to be specified for said non-match template, said non-match template, if invoked, causing said particular data structure pattern to be created in said result document.

7. (CANCELED)

8. The method of claim 4, wherein automatically generating said transformation document comprises:

selecting a non-matching data structure pattern that occurs in said first document that does not match any data structure pattern that occurs in said second document; and

inserting an action-needed template into said transformation document, said action-needed template being invoked when said non-matching data structure pattern is encountered during processing of said transformation document, said action-needed template comprising an indication that one or more actions needs to be specified for said action-needed template.

9. The method of claim 1, wherein automatically generating said transformation document comprises:

selecting a particular data structure pattern that occurs in said second document;  
determining a synonymous data structure pattern that is synonymous with said particular data structure pattern;

determining whether said first document comprises a matching data structure pattern that matches said synonymous data structure pattern; and

in response to a determination that said first document comprises said matching data structure pattern, inserting a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be created in said result document.

10. The method of claim 9, wherein said particular triggering data structure pattern comprises said matching data structure pattern.



11. The method of claim 9, wherein determining said synonymous data structure pattern comprises:

accessing a set of information that indicates that said particular data structure pattern is synonymous with said synonymous data structure pattern.

12. The method of claim 11, wherein said set of information is provided by a user.

13. The method of claim 1, wherein automatically generating said transformation document comprises:

determining whether any data structure pattern occurring in said first document is identical to a data structure pattern occurring in said second document; and

in response to a determination that a particular data structure pattern occurring in said first document is identical to a data structure pattern occurring in said second document, inserting a template into said transformation document, said template comprising a copy action, said template being invoked when said particular data structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be copied into said result document.

14. The method of claim 1,

wherein analyzing said first document comprises:

compiling a first list of data structure patterns that occur in said first document; and

wherein analyzing said second document comprises:

compiling a second list of data structure patterns that occur in said second document.

15. The method of claim 1, further comprising:  
processing said transformation document in conjunction with a third document to derive a transformed document, wherein said third document is a different document from said first document.

16. The method of claim 15, wherein said first document is of a particular type, and wherein said third document is of the same particular type.

17. A computer readable medium comprising instructions which, when executed by one or more processors, cause the one or more processors to generate a transformation document, said computer readable medium comprising:

instructions for causing one or more processors to analyze a first document;  
instructions for causing one or more processors to analyze a second document; and  
instructions for causing one or more processors to automatically generate, based upon said first and second documents, a transformation document which, when processed in conjunction with said first document, gives rise to a result document that is at least an approximation of said second document.

18. The computer readable medium of claim 17, wherein said first and second documents are XML (eXtensible Markup Language) documents.

19. The computer readable medium of claim 18, wherein said transformation document is an XSLT (eXtensible Stylesheet Language Transformation) document.

20. The computer readable medium of claim 17, wherein the instructions for causing one or more processors to automatically generate said transformation document comprises:

instructions for causing one or more processors to select a particular data structure pattern that occurs in said second document;

instructions for causing one or more processors to determine whether said first document comprises a matching data structure pattern that matches said particular data structure pattern; and

instructions for causing one or more processors to insert, in response to a determination that said first document comprises said matching data structure pattern, a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be created in said result document.

21. The computer readable medium of claim 20, wherein said particular triggering data structure pattern comprises said matching data structure pattern.

22. The computer readable medium of claim 20, wherein the instructions for causing one or more processors to automatically generate said transformation document further comprises:

instructions for causing one or more processors to insert, in response to a determination that said first document does not comprise said matching data structure pattern, a non-match template comprising one or more actions into said transformation document, said non-match template specifying a special triggering data structure pattern which indicates to a user that a triggering data structure pattern needs to be specified for said non-match template, said non-match template, if invoked, causing said particular data structure pattern to be created in said result document.

23. (CANCELED)

24. The computer readable medium of claim 20, wherein the instructions for causing one or more processors to automatically generate said transformation document comprises:

instructions for causing one or more processors to select a non-matching data structure pattern that occurs in said first document that does not match any data structure pattern that occurs in said second document; and

instructions for causing one or more processors to insert an action-needed template into said transformation document, said action-needed template being invoked when said non-matching data structure pattern is encountered during processing of said transformation

document, said action-needed template comprising an indication that one or more actions needs to be specified for said action-needed template.

25. The computer readable medium of claim 17, wherein the instructions for causing one or more processors to automatically generate said transformation document comprises:

instructions for causing one or more processors to select a particular data structure pattern that occurs in said second document;

instructions for causing one or more processors to determine a synonymous data structure pattern that is synonymous with said particular data structure pattern;

instructions for causing one or more processors to determine whether said first document comprises a matching data structure pattern that matches said synonymous data structure pattern; and

instructions for causing one or more processors to insert, in response to a determination that said first document comprises said matching data structure pattern, a template comprising one or more actions into said transformation document, said template being invoked when a particular triggering data structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be created in said result document.

26. The computer readable medium of claim 25, wherein said particular triggering data structure pattern comprises said matching data structure pattern.

27. The computer readable medium of claim 25, wherein the instructions for causing one or more processors to determine said synonymous data structure pattern comprises:

instructions for causing one or more processors to access a set of information that indicates that said particular data structure pattern is synonymous with said synonymous data structure pattern.

28. The computer readable medium of claim 27, wherein said set of information is provided by a user.

29. The computer readable medium of claim 17, wherein the instructions for causing one or more processors to automatically generate said transformation document comprises:

instructions for causing one or more processors to determine whether any data structure pattern occurring in said first document is identical to a data structure pattern occurring in said second document; and

instructions for causing one or more processors to insert, in response to a determination that a particular data structure pattern occurring in said first document is identical to a data structure pattern occurring in said second document, a template into said transformation document, said template comprising a copy action, said template being invoked when said particular data structure pattern is encountered during processing of said transformation document, and when invoked, causes said particular data structure pattern to be copied into said result document.

30. The computer readable medium of claim 17,  
wherein the instructions for causing one or more processors to analyze said first  
document comprises:

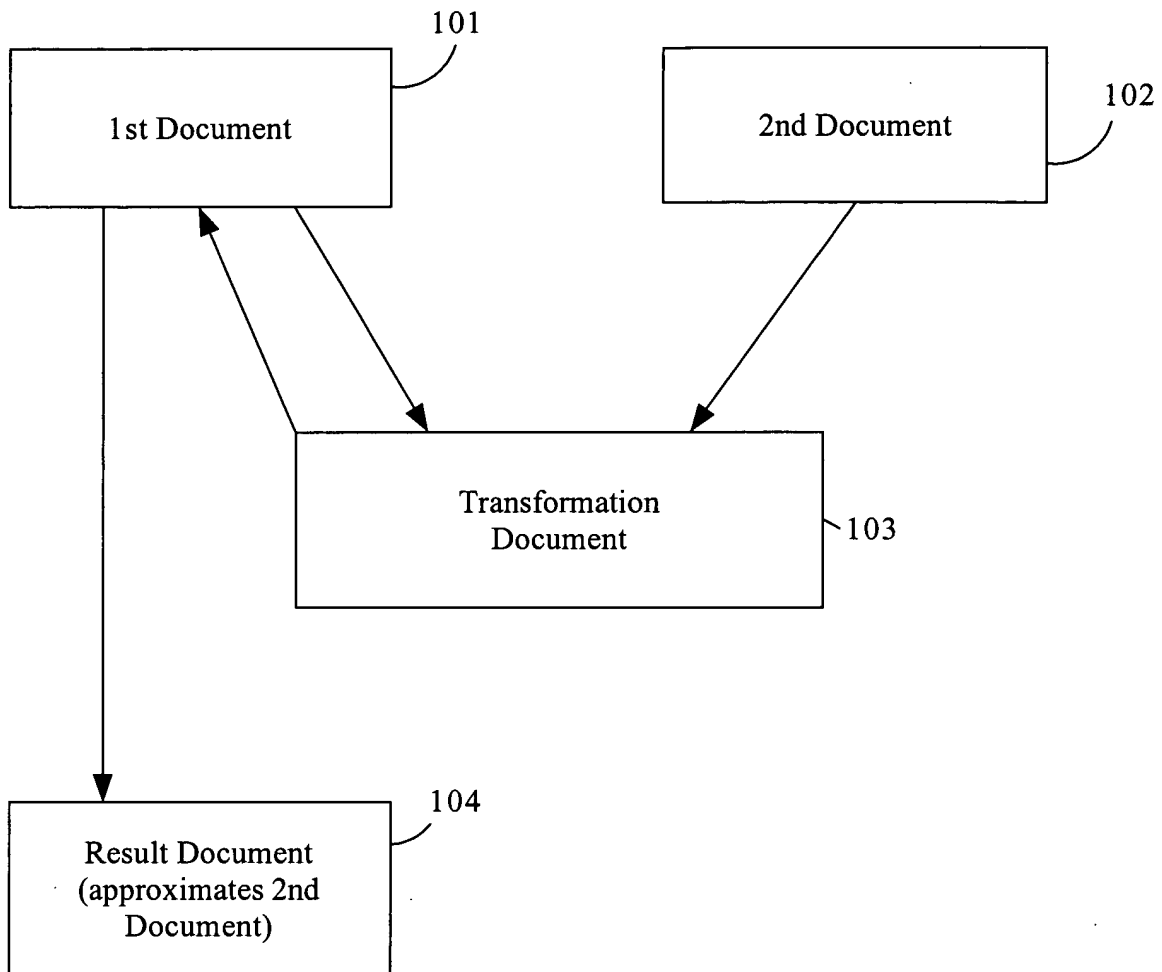
instructions for causing one or more processors to compile a first list of data  
structure patterns that occur in said first document; and

wherein the instructions for causing one or more processors to analyze said second  
document comprises:

instructions for causing one or more processors to compile a second list of  
data structure patterns that occur in said second document.

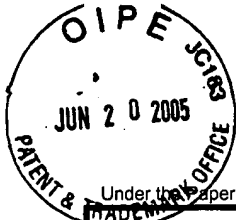
31. The computer readable medium of claim 17, further comprising:  
instructions for causing one or more processors to process said transformation  
document in conjunction with a third document to derive a transformed document, wherein  
said third document is a different document from said first document.

32. The computer readable medium of claim 31, wherein said first document is of  
a particular type, and wherein said third document is of the same particular type.



DRAWING 1





PTO/SB/21 (08-00)

Approved for use through 10/31/02. OMB 0651-0031

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Attorney Docket Number	15437-0545

**ENCLOSURES (check all that apply)**

<input checked="" type="checkbox"/> Fee Transmittal Form	<input type="checkbox"/> Assignment Papers (for an Application)	<input type="checkbox"/> After Allowance Communication to Group
<input checked="" type="checkbox"/> Fee Attached	<input type="checkbox"/> Drawing(s)	<input checked="" type="checkbox"/> Appeal Communication to Board of Appeals and Interferences
<input type="checkbox"/> Amendment / Response	<input type="checkbox"/> Licensing-related Papers	<input type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief)
<input type="checkbox"/> After Final	<input type="checkbox"/> Petition	<input type="checkbox"/> Proprietary Information
<input type="checkbox"/> Affidavits/declaration(s)	<input type="checkbox"/> Petition To Convert To a Provisional Application	<input type="checkbox"/> Status Letter
<input type="checkbox"/> Extension of Time Request	<input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address	<input type="checkbox"/> Other Enclosure(s) (please identify below):
<input type="checkbox"/> Express Abandonment Request	<input type="checkbox"/> Terminal Disclaimer	
<input type="checkbox"/> Information Disclosure Statement	<input type="checkbox"/> Request for Refund	
<input type="checkbox"/> Certified Copy of Priority Document(s)	<input type="checkbox"/> CD, number of CD(s) _____	
<input type="checkbox"/> Response to Missing Parts/ Incomplete Application	Remarks	
<input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53		

**SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT**

Firm or Individual name	Hickman Palermo Truong & Becker LLP
Signature	
Date	June 17, 2005

**CERTIFICATE OF MAILING**

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class: mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this date: June 17, 2005	
Type or printed name	Jennifer Newell
Signature	
Date	June 17, 2005

Burden Hour Statement: This form is estimated to take 0.2 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.



# FEE TRANSMITTAL for FY 2005

Patent fees are subject to annual revision,  
Small Entity payments must be supported by a small entity statement,  
otherwise large entity fees must be paid. See Forms PTO/SB/09-12.  
See 37 C.F.R. §§ 1.27 AND 1.28

## Complete if Known

Application Number	09/932,110
Filing Date	August 16, 2001
First Named Inventor	Matthew D. Birdier
Examiner Name	Thu V. Huynh
Group/Art Unit	2178
Attorney Docket No.	15437-0545

TOTAL AMOUNT OF PAYMENT (\$)**500.00**

## METHOD OF PAYMENT (check one)

1. ☒ Throughout the pendency of this application, please charge any additional fees, including any required extension of time fees, and credit all overpayments to deposit account 50-1302. A duplicate of this sheet is enclosed.

Deposit Account Number

50-1302

Deposit Account Name

Hickman Palermo Truong & Becker, LLP

2. ☒ Payment Enclosed:  
☒ Check ☐ Money Order ☐ Other

3. ☐ Applicant(s) is entitled to small entity status.  
See 37 CFR 1.27.

## FEE CALCULATION (continued)

### 3. ADDITIONAL FEES

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet.	
1251	120	2251	60	Extension for reply within first month	
1252	450	2252	225	Extension for reply within second month	
1253	1,020	2253	510	Extension for reply within third month	
1254	1,590	2254	795	Extension for reply within fourth month	
1255	2,160	2255	1,080	Extension for reply within fifth month	
1401	500	2401	250	Notice of Appeal	
1402	500	2402	250	Filing a brief in support of an appeal	500.00
1452	500	2452	250	Petition to revive - unavoidable	
1453	1,500	2453	750	Petition to revive - unintentional	
1501	1,400	2501	700	Utility issue fee (or reissue)	
1502	800	2502	400	Design issue fee	
1504	300	2504	300	Publication Fee	
1462	400	1462	400	Petitions Director not specifically provided for Group I	
1463	200	1463	200	Petitions Director not specifically provided for Group II	
1464	130	1464	130	Petitions Director not specifically provided for Group III	
1806	180	1806	180	Submission of information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	790	2809	395	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	790	2810	395	For each additional invention to be examined (37 CFR § 1.129(b))	
Other fee (specify) _____					
Other fee (specify) _____					

## FEE CALCULATION

### 1. BASIC FILING FEE

Large Entity		Small Entity		Fee Description	Fee Paid
Fee Code	Fee (\$)	Fee Code	Fee (\$)		
1011	300	2011	150	Utility filing fee	
1111	500	2111	250	Utility Search fee	
1311	200	2311	100	Utility Examination fee	
1081	250	2081	125	Utility Application Size Fee	
1005	200	2005	100	Provisional Application Fee	
1085	250	20835	125	Provisional Application Size Fee	
SUBTOTAL (1)					(\$) <b>0.00</b>

### 2. EXTRA CLAIM FEES

	Highest Paid Claims	Extra Claims	Fee from Below	Fee Paid
Total Claims	-20**=	0	50.00	0.00
Independent Claims	-3***=	0	200.00	0.00
Multiple Dependent				

\*\*or number previously paid, if greater; For Reissues, see below

Large Entity		Small Entity		Fee Description
Fee Code	Fee (\$)	Fee Code	Fee (\$)	
1202	50	2202	25	Claims in excess of 20
1201	200	2201	100	Independent claims in excess of 3
1203	360	2203	180	Multiple dependent claim, if not paid
1204	200	2204	100	**Reissue independent claims over original patent
1205	50	2205	25	**Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)**0.00**

\*Reduced by Basic Filing Fee Paid

SUBTOTAL (3)

(\$)**500.00**

## SUBMITTED BY

Name (Print/Type)	Bobby K. Truong	Registration No. (Attorney/Agent)	37,499	Telephone	(408) 414-1080
Signature		Date	June 17, 2005		

**WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.